

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

APPENDIX A

STAFF REPORT

ON

LAUREL COUNTY WATER DISTRICT NO. 2

CASE NO. 9569

**Prepared By: Larry Harley
Manager, Rates & Tariffs
Division**

Staff Audit Report on
Laurel County Water District No. 2

PREFACE

On April 25, 1986, Laurel County Water District No. 2 (Laurel County No. 2) filed its application in Case No. 9569 seeking an increase in its rates for water service. Laurel County No. 2 indicated that the proposed rates would generate approximately \$493,778 on an annual basis, an increase of approximately 22.0 percent above the rates currently being charged by Laurel County No. 2.

As part of its endeavor to shorten and simplify the regulatory process for utilities, the Commission chose to perform a limited financial audit of Laurel County No. 2's operations for the test period, calendar year 1985. The Commission's objective was to substantially reduce the need for written data requests, decrease the time necessary to examine the application and, therefore, decrease the expense to the utility. Larry Harley of the Commission's Division of Rates and Tariffs performed the audit on July 30-31, 1986, at the office of Laurel County No. 2 in London, Kentucky.

SCOPE

The scope of the audit was limited to obtaining information to determine whether the operating expenses as reported in the 1985 Annual Report of Laurel County No. 2 which were used as the test period in this case were representative of normal operating conditions. Laurel County No. 2 did not make any pro forma adjustments to its test year operating expenses with the exception

of an increase in water rates. Supporting documentation related to expenditures charged to test year operating expenses was reviewed, including subsidiary records such as invoices and payroll records. Insignificant or immaterial discrepancies were not pursued and are not addressed herein. The findings and recommendations in this report do not contain any factors related to Case No. 9509 which pertains to Laurel County No. 2's application for construction and financing. Based on the findings contained herein, the Commission staff has made several pro forma adjustments to the test year operating expenses of Laurel County No. 2 which will be discussed in detail in this report. However, this audit report does not address the subject of rate design pertaining to the proposed rates of Laurel County No. 2.

BACKGROUND

Laurel County No. 2 is one of four water utilities being operated from a central office in London, Kentucky, the other three being Wood Creek Water District ("Wood Creek"), West Laurel Water Association ("West Laurel"), and East Laurel Water District ("East Laurel"). Laurel County No. 2 and Wood Creek utilize a joint office staff made up of six employees, and each water district also maintains an individual outside staff which performs its own maintenance and construction services and those of West Laurel and East Laurel as these water utilities do not have any employees to perform such tasks. Office services are also performed for West Laurel and East Laurel by Laurel County No. 2 and Wood Creek at a rate of \$2.30 per customer, per month. Costs of providing office services to West Laurel and East Laurel are

not specifically identified and thus the receipts of funds by the providers are recorded as other operating revenues. However funds received from maintenance and construction services are reflected as a net figure of Account No. 415 - Revenues from Merchandising, Jobbing and Contract Work and Account No. 416 - Costs and Expenses of Merchandising, Jobbing and Contract Work which is recorded as other income below the line. With regard to maintenance and construction services Laurel County No. 2 and Wood Creek have established a work order procedure where direct labor and materials use are specifically billed. No profit margin is added. The resulting balance in accounts 415 and 416 reflects the proportionate share of labor and other overheads not specifically identified. Thus since these costs continue to be recorded as costs to Laurel County No. 2 and Wood Creek, this net amount should also be recorded as other operating revenues (above the line) absent further refinement for accounting purposes.

FINDINGS

Operating Revenues

Laurel County No. 2 showed test period operating revenues of \$404,699 from the sale of water to its 2,380 customers. When Laurel County No. 2 applied the proposed rates to its billing analysis the result was pro forma water sales of \$493,778 or an increase of \$89,079. After a review of Laurel County No. 2's billing analysis, the rate design section of the Commission staff determined that Laurel County No. 2 had included additional billing units on the assumption of customer growth. However no adjustments were made to either revenues or expenses. Thus, when

the proposed rates are applied to actual billing units a downward adjustment of \$24,579 results and pro forma water sales revenues are \$469,199, or \$64,500 above actual test year revenues.

Salaries and Wages

An examination of the payroll records of Laurel County No. 2 for the test period showed total wages and salaries of \$202,186 being paid to its employees. Six of the employees received a wage increase August, 1985, ranging from 4 to 15 percent based on the individual qualifications of the employee. The Commission staff annualized these wage increases resulting in an increase of \$11,749 to salaries and wages for the test period.

Purchased Water

During the test period, Laurel County No. 2 incurred purchased water cost of \$61,250 and other pumping and treatment costs of \$142,672. In response to this Commission's request for information dated July 16, 1986, Laurel County No. 2 furnished a breakdown of water purchased, produced and distribution thereof for the test period which indicated an abnormally high loss of water during the test period due to unknown causes as stated in the response, resulting in a line loss of 17.44 percent.¹ The Commission has an established precedent for rate-making purposes of disallowing the cost associated with water loss in excess of 15 percent. Therefore, by using the weighted cost of 1000 gallons of water produced and purchased, the Commission has determined

¹ 234,521,900 gallons produced and purchased less 193,626,478 gallons sold and accounted for water = 40,895,422 line loss ÷ 234,521,900 = 17.44%.

that the appropriate adjusted purchased water expense for rate-making purposes is \$198,069, or \$5,853² less than the level projected by Laurel County No. 2.

Insurance Expense

An examination of invoices indicated that Laurel County No. 2 paid premiums for auto insurance of \$3,100 and workers compensation insurance of \$6,720 totalling \$9,820 for the period June 30, 1985, to June 30, 1986. Premiums as shown on the invoices for the period 1986-1987 indicated a total cost of \$11,501, or an increase of \$1,681 over the previous year. Therefore, insurance expense should be increased by \$1,681.

Depreciation Expense

Laurel County No. 2 reported depreciation expense of \$65,735 for the test period resulting in a composite rate of approximately 2.92 percent based on utility plant in service (less the cost of land) of \$2,251,465. It has been the practice of the Commission

² Computation of adjustment to purchased water expense:

Purchased Water Expense	\$ 61,250
Pumping Expense	22,236
Treatment Expense	120,436
Total	<u>234,521.9</u>
Water Produced and purchased - 1,000 gallons	\$.8695
Water Sold and Accounted For - 1,000 gallons	193,626.5
Allowable Factor	● .85
Allowable Gallons	<u>227,795.9</u>
Average Cost of Water - 1,000 gallons	X .8695
Allowable Cost of Water Produced and Purchased	\$ 198,069
Cost of Water Produced and Purchased Per Utility	203,922
Amount of Adjustment	<u>\$ 5,853</u>

in previous decisions to compute depreciation expense for rate-making purposes on the basis of original cost of the plant in service less contributions in aid of construction, as a utility should not be allowed recovery of that portion of the plant which has been provided free of cost. During the course of the audit, the staff found no evidence that the Commission should change this practice and therefore recommends that Laurel County No. 2's depreciation expense be reduced by \$23,169 to reflect the contributed portion of Laurel County No. 2's plant in service. Therefore, test period adjusted depreciation expense is \$42,566.³

SUMMARY

Based on the recommendations proposed by the staff in this audit report, Laurel County No. 2's operations for the calendar year 1985 are as follows:

<u>Income:</u>	<u>Laurel County Pro Forma</u>	<u>Staff Adjustments</u>	<u>Staff Adjusted</u>
Water Sales	\$493,778*	\$ (24,579)	\$469,199*
Forfeited Discounts	4,464		4,464
Misc. Service Discounts	6,450		6,450
Office Services	35,988		35,988
Other Water Revenues	1,159		1,159
Interest Income	25,632		25,632
Net Income from Mdse & Job	17,270		17,270
Total Income	<u>\$584,741</u>	<u>\$ (24,579)</u>	<u>\$560,162</u>

* Stated on the basis of the proposed rates.

³ Computation of Depreciation Expense:

Depreciation expense, per books, as of 12/31/85	\$65,735
Less:	
Contributions in aid of constr. 12/31/86	\$793,448
Composite depreciation rate	X 2.92%
Allowable depreciation expense	<u>(23,169)</u>
	<u>\$42,566</u>

Operating Expenses:

Purchased Water	\$ 61,250	\$ (5,853)a.	\$ 55,397
Pumping Expenses	22,236		22,236
Water Treatment Expenses	120,436		120,436
Trans. and Dist. Expenses	66,518	11,749 b.	78,267
Customer Accounting Expenses	96,589		96,589
Adm. and General Expenses	54,685	1,681 c.	56,366
Depreciation Expense	65,735	(23,169)d.	42,566
Taxes Other Than Income	520		520
Total Operating Expenses	<u>\$487,969</u>	<u>\$ (15,592)</u>	<u>\$472,377</u>
Net Income Before Interest Exp.	96,772	(8,987)	87,785
Less:			
Interest on Long-Term Debt	47,237		47,237
Other Interest Expense	329		329
Net Income	<u>\$ 49,206</u>	<u>\$ (8,987)</u>	<u>\$ 40,219</u>

- a. Line loss adjustment.
- b. Annualization of employee wage adjustment.
- c. Insurance expense adjustment.
- d. Contributed property adjustment.

The staff has determined that Laurel County No. 2's average annual debt service based on debt outstanding of \$1,050,100 during the test period is \$75,857.⁴ Laurel County No. 2's adjusted net income available for debt service of \$87,785 provides a debt service coverage ("DSC") of 1.16X. The staff is of the opinion that this coverage is fair, just and reasonable. Accordingly, the additional revenues from water sales of \$64,500 are necessary to provide the 1.16X which will ensure the financial stability of Laurel County No. 2.

⁴ Computation of average debt service:

5-year average of principal	\$32,420
5-year average of interest	43,437
Total debt service	<u>\$75,857</u>

August, 1986

Submitted By:



Larry Harley, Manager
Rates & Tariffs Division